# Setting Up Brailliant BI 20/40X, Mantis Q40, and Chameleon 20 Devices on Android through a USB Connection

To configure your Brailliant BI 20/40X, Mantis Q40, and the Chameleon 20 for use on an Android device via USB, follow these steps:

1. Download the BRLTTY app from the Google Play Store. It can also be found here:

[BRLTTY - Apps on Google Play](https://play.google.com/store/apps/details?id=org.a11y.brltty.android&hl=en_US&gl=US)

1. Download the BrailleBack application from the Google Play Store. It can also be found here:

[Google BrailleBack - Apps on Google Play](https://play.google.com/store/apps/details?id=com.googlecode.eyesfree.brailleback&hl=en_US&gl=US)

1. On your Android device, go to: Settings>Accessibility>BRLTTY and turn it on. You will also want to enable the BRLTTY shortcut and choose the Accessibility button. Also, in the settings>Accessibility area, turn on BrailleBack.
2. Next, connect your braille display to your Android device with a USB-C to USB-C cable, or an On-the-Go (OTG) cable.
3. On the braille display, head to Terminal>connected devices>USB connection and press enter. The message “braille display” will now appear.
4. Activate BRLTTY settings>Manage Devices>Add device.
5. Under “Communication method, choose “USB”.
6. Select your braille display, which will now be visible in the list.
7. Next, select the “Braille Driver” category and choose “HumanWare”. Then choose “Done”.
8. You can then select your device from the list in BRLTTY.

## Enabling the Braille Keyboard

In the event your braille device is not being recognised as a braille keyboard you will need to do the following:

Go to System -> Languages and Input, virtual (or, on-screen keyboard), then to Manage Keyboards. On that screen you can enable BRLTTY. After doing that, select BRLTTY through the Accessibility button and select switch input method. Choose the BRLTTY input service. This will now allow your braille display to function as a braille keyboard.

## Braille Commands for Working with your Android Device

BrailleBack offers several keyboard commands to make working with your Android device even easier. They are listed as follows:

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| **Keystroke** |
| Help | Space + dots 1 2 3 |
| Back | Space + dots 1 2 |
| Home | Space + dots 1 2 5 |
| Notifications | Space + dots 1 3 4 5 |
| Recent apps | Space + dots 1 2 3 5 |
| Switch between literary and computer braille | Space + dots 1 2 4 5 |
| Search the screen for text | Space + dots 3 4 |
| Enter key (when editing text) | Space + dot 8 |
| Backspace (when editing text) | Space + dot 7 |
| Navigate to the right or left | Right or left pan key |

**“Tip:**For devices with routing keys, use routing keys to tap the item under the finger or move the caret when editing text. On some devices, long pressing a routing key has the same effect as long pressing the item on the screen.”

## **Get keyboard help**

You can use either of these options to find keyboard help while you use BrailleBack:

* Enter **Space + dots 1 2 3**.
* Open your device's Settings app  . Open**Accessibility** and then**BrailleBack** and then**Settings** and then**Keyboard help**.

### More Information

If you would like more information on BRLTTY or BrailleBack, please visit the following websites:

[BrailleBack - Android Accessibility Help (google.com)](https://support.google.com/accessibility/android/topic/3529933?hl=en&ref_topic=9078845)

[BRLTTY on Android](https://brltty.app/archive/Android/brltty-on-android.html#connecting-via-usb)